**Day 1:**

**1.)%{**

**%}**

**%%**

**[A-Z] {printf("%c",yytext[0]);}**

**. {}**

**%%**

**int yywrap(){}**

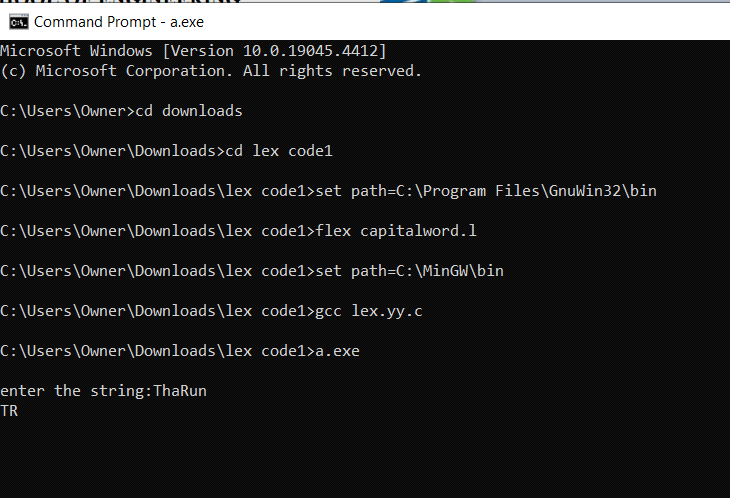
**int main()**

**{**

**printf("\nenter the string:");**

**yylex();**

**}**

****

**2.)**

**%{**

**#include<stdio.h>**

**%}**

**%%**

**[0-9]+ {printf("%s,is a digit",yytext);}**

**.+ {printf("it is not digit");}**

**%%**

**int main()**

**{**

**printf("\n enter the digit:");**

**yylex();**

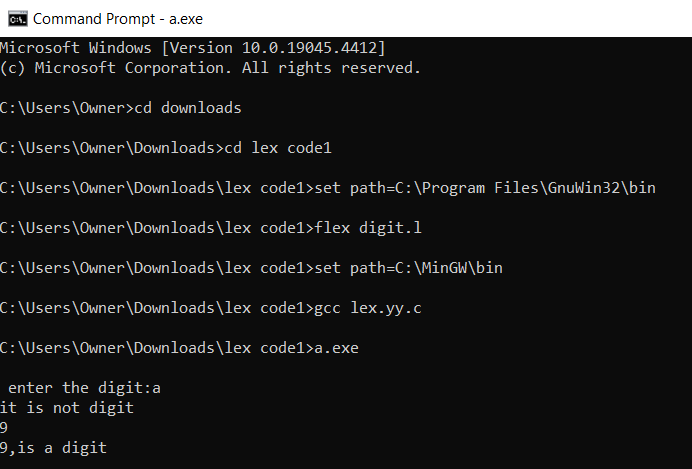
**}**

**int yywrap()**

**{**

**return 1;**

**}**

****

**3.)%%**

**[1-9][0-9]{9} {printf("\nmobile number is valide:");}**

**.+ {printf("\nmobile number is invalide:");}**

**%%**

**int main()**

**{**

**printf("enter the number:");**

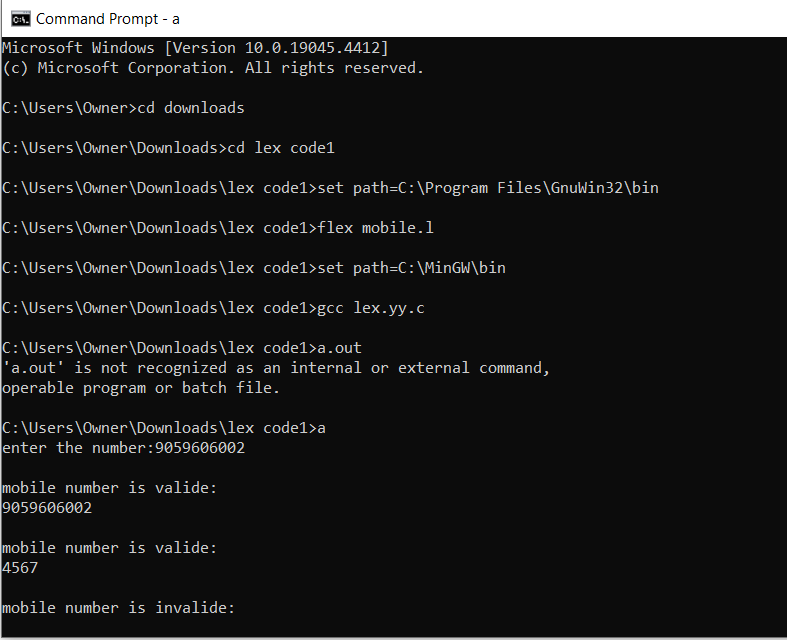
**yylex();**

**return 0;**

**}**

**int yywrap()**

**{}**

****

**4.)%{**

**int vow\_count=0;**

**int const\_count=0;**

**%}**

**%%**

**[aeiouAEIOU] {vow\_count++;}**

**[a-zA-Z] {const\_count++;}**

**%%**

**int yywrap(){}**

**int main()**

**{**

**printf("enter the string of vowels and consonents:");**

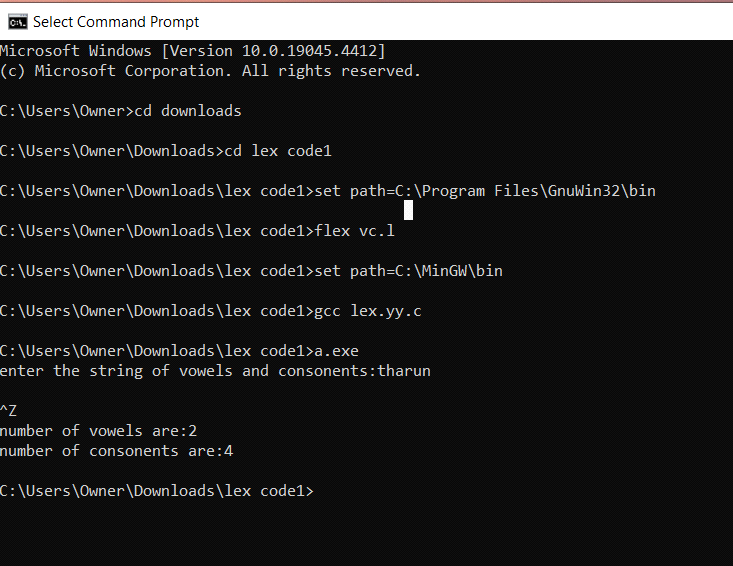
**yylex();**

**printf("number of vowels are:%d\n",vow\_count);**

**printf("number of consonents are:%d\n",const\_count);**

**return 0;**

**}**

****

**5.)**

**%{**

**%}**

**%%**

**[a-zA-Z][a-zA-Z0-9]+ {printf("\n is identifier",yytext);}**

**.+ {printf("\n%s is Keyword",yytext);}**

**%%**

**int yywrap(){}**

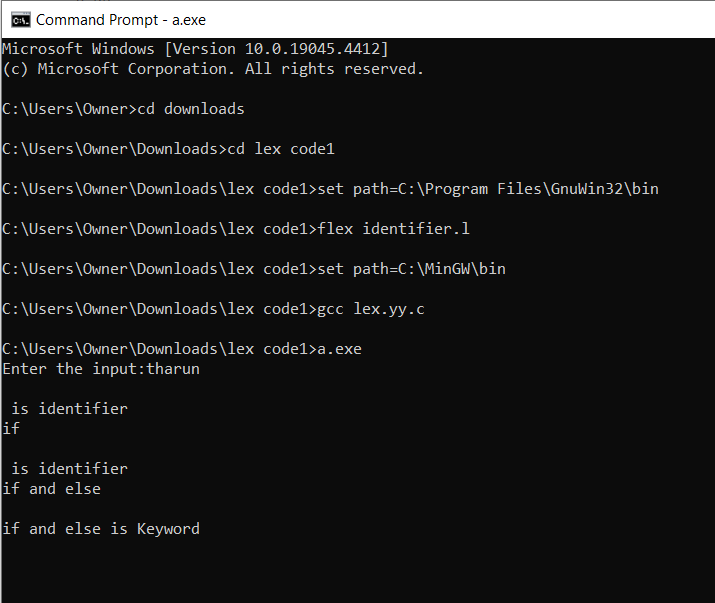
**int main()**

**{**

**printf("Enter the input:");**

**yylex();**

**}**

****

**6.)%{**

**int positive\_count = 0;**

**int negative\_count = 0;**

**%}**

**DIGIT [0-9]**

**SIGN [-+]**

**%%**

**{SIGN}?{DIGIT}+ {**

**int num = atoi(yytext);**

**if (num > 0)**

**positive\_count++;**

**else if (num < 0)**

**negative\_count++;**

**}**

**.|\n ; /\* ignore any other characters \*/**

**%%**

**int yywrap() {**

**return 1; // Indicate end of input**

**}**

**int main(int argc, char \*\*argv) {**

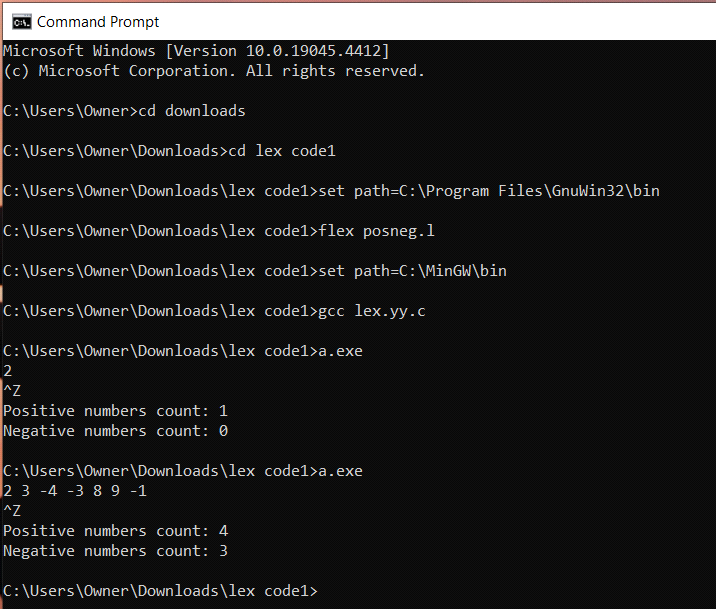
**yylex();**

**printf("Positive numbers count: %d\n", positive\_count);**

**printf("Negative numbers count: %d\n", negative\_count);**

**return 0;**

**}**

****

**8.)%{**

**#include <stdio.h>**

**%}**

**VOWEL [aeiouAEIOU]**

**LETTER [a-zA-Z]**

**%%**

**{VOWEL}{LETTER}\* { printf("Valid string: %s\n", yytext); }**

**.|\n ; /\* ignore any other characters \*/**

**%%**

**int yywrap() {**

**return 1; // Indicate end of input**

**}**

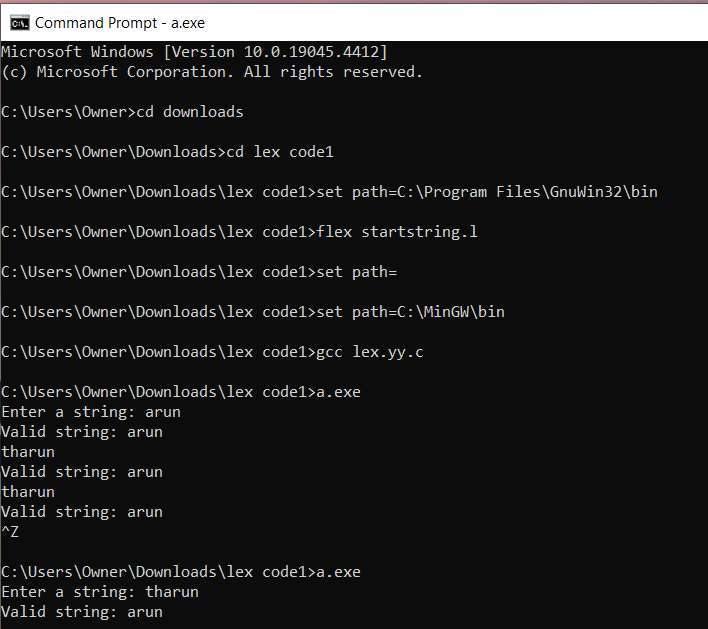
**int main(int argc, char \*\*argv) {**

**printf("Enter a string: ");**

**yylex();**

**return 0;**

**}**

****